



SEQUENCE LISTING

<110> Cashman, Neil
Paramithiotis, Eustache
Slon-Usakiewicz, Jacek
Haghighat, Ashkan
Pinard, Marc
Lawton, Trebor

<120> PRION PROTEIN PEPTIDES AND USES THEREOF

<130> 50111/002002

<140> US 09/602,775

<141> 2000-06-23

<150> 60/140,634

<151> 1999-06-23

<160> 34

<170> FastSEQ for Windows Version 4.0

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<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<221> VARIANT

<222> (1)...(4)

<223> Xaa = Any Amino Acid

<400> 1

Xaa Tyr Tyr Xaa

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<210> 2

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<221> VARIANT

<222> (1)...(7)

<223> Xaa = Any Amino Acid

<400> 2

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APR 22 2002

TECH CENTER 1600/2900

Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5

<210> 3
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(10)
<223> Xaa = Any Amino Acid

<400> 3
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10

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<220>
<223> Synthetic peptide

<221> VARIANT
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<400> 4
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<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
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<223> Xaa = Any Amino Acid

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Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15

<210> 6
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<221> VARIANT
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<223> Xaa = Any Amino Acid

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Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa

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<211> 22
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<220>
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<221> VARIANT
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<223> Xaa = Any Amino Acid

<400> 7
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa
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<210> 8
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
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<223> Xaa = Any Amino Acid

<400> 8
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

<210> 9
<211> 28
<212> PRT
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<220>
<223> Synthetic peptide

<221> VARIANT
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<223> Xaa = Any Amino Acid

<400> 9
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
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Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

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<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(31)
<223> Xaa = Any Amino Acid

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1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25 30

<210> 11
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<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid

<400> 11
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr

Tyr Xaa 20

25

30

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<220>
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<210> 16
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<220>
<223> Synthetic peptide

<221> VARIANT
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<223> Xaa = Any Amino Acid

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1 5 10 15

<210> 17
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<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(19)
<223> Xaa = Any Amino Acid

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1 5 10 15
Tyr Tyr Xaa

<210> 18
<211> 22

<212> PRT
<213> Artificial Sequence

<220>
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<221> VARIANT
<222> (1)...(22)
<223> Xaa = Any Amino Acid

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1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa
20

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<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(25)
<223> Xaa = Any Amino Acid

<400> 19
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

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<210> 20
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(28)
<223> Xaa = Any Amino Acid

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Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

<210> 21
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(31)
<223> Xaa = Any Amino Acid

<400> 21
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25 30

<210> 22
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid

<400> 22
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa

<210> 23
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(37)
<223> Xaa = Any Amino Acid

<400> 23
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1 5 10 15

Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr
 20 25 30
 Tyr Xaa Tyr Tyr Xaa
 35

<210> 24
 <211> 40
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic peptide

<221> VARIANT
 <222> (1)...(40)
 <223> Xaa = Any Amino Acid

<400> 24
 Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
 1 5 10 15
 Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr
 20 25 30
 Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
 35 40

<210> 25
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic peptide

<221> VARIANT
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<400> 25
 Xaa Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
 1 5 10

<210> 26
 <211> 264
 <212> PRT
 <213> Bos taurus

<400> 26
 Met Val Lys Ser His Ile Gly Ser Trp Ile Leu Val Leu Phe Val Ala
 1 5 10 15
 Met Trp Ser Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly
 20 25 30
 Gly Trp Asn Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly
 35 40 45

Gly Asn Arg Tyr Pro Pro Gln Gly Gly Gly Gly Trp Gly Gln Pro His
 50 55 60
 Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His
 65 70 75 80
 Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His
 85 90 95
 Gly Gly Gly Gly Trp Gly Gln Gly Gly Thr His Gly Gln Trp Asn Lys
 100 105 110
 Pro Ser Lys Pro Lys Thr Asn Met Lys His Val Ala Gly Ala Ala Ala
 115 120 125
 Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr Met Leu Gly Ser Ala
 130 135 140
 Met Ser Arg Pro Leu Ile His Phe Gly Ser Asp Tyr Glu Asp Arg Tyr
 145 150 155 160
 Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln Val Tyr Tyr Arg Pro
 165 170 175
 Val Asp Gln Tyr Ser Asn Gln Asn Asn Phe Val His Asp Cys Val Asn
 180 185 190
 Ile Thr Val Lys Glu His Thr Val Thr Thr Thr Lys Gly Glu Asn
 195 200 205
 Phe Thr Glu Thr Asp Ile Lys Met Met Glu Arg Val Val Glu Gln Met
 210 215 220
 Cys Ile Thr Gln Tyr Gln Arg Glu Ser Gln Ala Tyr Tyr Gln Arg Gly
 225 230 235 240
 Ala Ser Val Ile Leu Phe Ser Ser Pro Pro Val Ile Leu Leu Ile Ser
 245 250 255
 Phe Leu Ile Phe Leu Ile Val Gly
 260

<210> 27
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 27
 Met Ala Asn Leu Gly Cys Trp Met Leu Val Leu Phe Val Ala Thr Trp
 1 5 10 15
 Ser Asp Leu Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30
 Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45
 Tyr Pro Pro Gln Gly Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 50 55 60
 Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 65 70 75 80
 Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly Gly Gly Thr His
 85 90 95
 Ser Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
 100 105 110
 Ala Gly Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
 115 120 125
 Met Leu Gly Ser Ala Met Ser Arg Pro Ile Ile His Phe Gly Ser Asp
 130 135 140
 Tyr Glu Asp Arg Tyr Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln
 145 150 155 160
 Val Tyr Tyr Arg Pro Met Asp Glu Tyr Ser Asn Gln Asn Asn Phe Val
 165 170 175

His Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr
180 185 190
Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg
195 200 205
Val Val Glu Gln Met Cys Ile Thr Gln Tyr Glu Arg Glu Ser Gln Ala
210 215 220
Tyr Tyr Gln Arg Gly Ser Ser Met Val Leu Phe Ser Ser Pro Pro Val
225 230 235 240
Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
245 250

<210> 28
<211> 256
<212> PRT
<213> Ovis aries

<400> 28
Met Val Lys Ser His Ile Gly Ser Trp Ile Leu Val Leu Phe Val Ala
1 5 10 15
Met Trp Ser Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly
20 25 30
Gly Trp Asn Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly
35 40 45
Gly Asn Arg Tyr Pro Pro Gln Gly Gly Gly Trp Gly Gln Pro His
50 55 60
Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His
65 70 75 80
Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly
85 90 95
Gly Ser His Ser Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met
100 105 110
Lys His Val Ala Gly Ala Ala Ala Gly Ala Val Val Gly Gly Leu
115 120 125
Gly Gly Tyr Met Leu Gly Ser Ala Met Ser Arg Pro Leu Ile His Phe
130 135 140
Gly Asn Asp Tyr Glu Asp Arg Tyr Tyr Arg Glu Asn Met Tyr Arg Tyr
145 150 155 160
Pro Asn Gln Val Tyr Tyr Arg Pro Val Asp Arg Tyr Ser Asn Gln Asn
165 170 175
Asn Phe Val His Asp Cys Val Asn Ile Thr Val Lys Gln His Thr Val
180 185 190
Thr Thr Thr Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Ile Lys Ile
195 200 205
Met Glu Arg Val Val Glu Gln Met Cys Ile Thr Gln Tyr Gln Arg Glu
210 215 220
Ser Gln Ala Tyr Tyr Gln Arg Gly Ala Ser Val Ile Leu Phe Ser Ser
225 230 235 240
Pro Pro Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
245 250 255

<210> 29
<211> 254
<212> PRT
<213> Mus musculus

<400> 29

Met Ala Asn Leu Gly Tyr Trp Leu Leu Ala Leu Phe Val Thr Met Trp
 1 5 10 15
 Thr Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30
 Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45
 Tyr Pro Pro Gln Gly Gly Thr Trp Gly Gln Pro His Gly Gly Gly Trp
 50 55 60
 Gly Gln Pro His Gly Gly Ser Trp Gly Gln Pro His Gly Gly Ser Trp
 65 70 75 80
 Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly Gly Thr His Asn
 85 90 95
 Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Leu Lys His Val Ala
 100 105 110
 Gly Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr Met
 115 120 125
 Leu Gly Ser Ala Met Ser Arg Pro Met Ile His Phe Gly Asn Asp Trp
 130 135 140
 Glu Asp Arg Tyr Tyr Arg Glu Asn Met Tyr Arg Tyr Pro Asn Gln Val
 145 150 155 160
 Tyr Tyr Arg Pro Val Asp Gln Tyr Ser Asn Gln Asn Asn Phe Val His
 165 170 175
 Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr Thr
 180 185 190
 Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg Val
 195 200 205
 Val Glu Gln Met Cys Val Thr Gln Tyr Gln Lys Glu Ser Gln Ala Tyr
 210 215 220
 Tyr Asp Gly Arg Arg Ser Ser Ser Thr Val Leu Phe Ser Ser Pro Pro
 225 230 235 240
 Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
 245 250

<210> 30
 <211> 254
 <212> PRT
 <213> Mesocricetus auratus

<400> 30
 Met Ala Asn Leu Ser Tyr Trp Leu Leu Ala Leu Phe Val Ala Met Trp
 1 5 10 15
 Thr Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30
 Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45
 Tyr Pro Pro Gln Gly Gly Gly Thr Trp Gly Gln Pro His Gly Gly Gly
 50 55 60
 Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 65 70 75 80
 Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly Gly Gly Thr His
 85 90 95
 Asn Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
 100 105 110
 Ala Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
 115 120 125
 Met Leu Gly Ser Ala Met Ser Arg Pro Met Met His Phe Gly Asn Asp
 130 135 140

Trp	Glu	Asp	Arg	Tyr	Tyr	Arg	Glu	Asn	Met	Asn	Arg	Tyr	Pro	Asn	Gln	
145					150					155					160	
Val	Tyr	Tyr	Arg	Pro	Val	Asp	Gln	Tyr	Asn	Asn	Gln	Asn	Asn	Phe	Val	
				165					170						175	
His	Asp	Cys	Val	Asn	Ile	Thr	Ile	Lys	Gln	His	Thr	Val	Thr	Thr	Thr	
			180					185					190			
Thr	Lys	Gly	Glu	Asn	Phe	Thr	Glu	Thr	Asp	Ile	Lys	Ile	Met	Glu	Arg	
		195					200					205				
Val	Val	Glu	Gln	Met	Cys	Thr	Thr	Gln	Tyr	Gln	Lys	Glu	Ser	Gln	Ala	
	210					215					220					
Tyr	Tyr	Asp	Gly	Arg	Arg	Ser	Ser	Ala	Val	Leu	Phe	Ser	Ser	Pro	Pro	
225					230					235					240	
Val	Ile	Leu	Leu	Ile	Ser	Phe	Leu	Ile	Phe	Leu	Met	Val	Gly			
				245					250							

<210> 31
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic peptide

<400> 31
 Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
 1 5

<210> 32
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic peptide

<400> 32
 Cys Tyr Tyr Arg
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<210> 33
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic peptide

<400> 33
 Cys Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
 1 5 10

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 Cont

<210> 34
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

a¹
Cont <400> 34
Cys Lys Tyr Glu Asp Arg Tyr Tyr Arg Glu
1 5 10
